Database :

UniProt\_02:\*

1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| D = ===1+ |       | τ     |            |     |            |                    |
|-----------|-------|-------|------------|-----|------------|--------------------|
| Result    |       | Query |            |     |            |                    |
| No.       | Score | Match | Length     | DB  | ID         | Description        |
| ·         |       |       | <b>-</b>   |     |            |                    |
| 1         | 1328  | 99.6  | <u>349</u> | . 1 | GUB_FIBSU  | P17989 fibrobacter |
| 2         | 266.5 | 20.0  | 259        | 1   | GUB_BACBR  | P37073 bacillus br |
| 3         | 266.5 | 20.0  | 851        | 2   | Q9K7X5     | Q9k7x5 bacillus ha |
| 4         | 248.5 | 18.6  | 256        | 2   | Q9APD8     | Q9apd8 bacillus ci |
| 5         | 247.5 | 18.6  | 276        | 2   | Q45648     | Q45648 bacillus sp |
| 6         | 245.5 | 18.4  | 214        | 2   | Q8GMY0     | Q8gmy0 bacillus li |
| 7         | 245.5 | 18.4  | 242        | 1   | GUB_BACSU  | P04957 bacillus su |
| 8         | 244.5 | 18.3  | 215        | 2   | Q84GK1     | Q84gk1 bacillus li |
| 9         | 243   | 18.2  | 334        | 2   | Q84C00     | Q84c00 clostridium |
| 10        | 242.5 | 18.2  | 214        | 2   | Q93GE8     | Q93ge8 uncultured  |
| 11        | 242.5 | 18.2  | 802        | 1   | XYND_RUMFL | Q53317 ruminococcu |
| 12        | 242.5 | 18.2  | 802        | 2   | Q9S310     | Q9s310 ruminococcu |
| 13        | 241.5 | 18.1  | 214        | 2   | Q93GE7     | Q93ge7 uncultured  |
|           |       |       |            |     |            | -                  |

Database: PIR\_79:\*

1: pir1:\* 2: pir2:\* 3: pir3:\*

4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|        |       | 용     |        |    | 1        |                    |
|--------|-------|-------|--------|----|----------|--------------------|
| Result |       | Query |        |    |          |                    |
| No.    | Score | Match | Length | DB | ID       | Description        |
| 1      | 1328  | 99.6  | 349    | 2  | A44507   | licheninase (EC 3. |
| 2      | 266.5 | 20.0  | 851    | 2  | H84053   | endo-beta-1,3-1,4  |
| 3      | 265.5 | 19.9  | 252    | 2  | A48378   | licheninase (EC 3. |
| 4      | 247.5 | 18.6  | 276    | 2  | , I40453 | licheninase (EC 3. |
| 5      | 245.5 | 18.4  | 242    | 1  | LXBS     | licheninase (EC 3. |
| 6      | 242.5 | 18.2  | 802    | 2  | A36910   | xylanase, beta(1,3 |
| 7      | 238.5 | 17.9  | 239    | 1  | A29091   | licheninase (EC 3. |
| 8      | 237   | 17.8  | 334    | 1  | S23498   | licheninase (EC 3. |
| 9      | 229.5 | 17.2  | 243    | 1  | S15388   | licheninase (EC 3. |
| 10     | 226   | 17.0  | 237    | 1  | S11927   | licheninase (EC 3. |
| 1.1    | 225   | 16.9  | 238    | 1  | S19012   | licheninase (EC 3. |

```
Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
```

6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|        |         | - 15  |         |    |                      |                   |
|--------|---------|-------|---------|----|----------------------|-------------------|
| Result |         | Query |         |    |                      |                   |
| No.    | Score   | Match | Length  | DB | ID                   | Description       |
|        | <b></b> |       | <b></b> |    |                      |                   |
| 1      | 1103    | 82.7  | 228     | 3  | US-09-286-690-12     | Sequence 12, Appl |
| 2      | 257.5   | 19.3  | 308     | 4  | US-09-463-862A-1     | Sequence 1, Appli |
| 3      | 245.5   | 18.4  | 242     | 3  | US-09-286-690-8      | Sequence 8, Appli |
| 4      | 244     | 18.3  | 239     | 1  | US-08-103-998-2      | Sequence 2, Appli |
| 5      | 231.5   | 17.4  | 279     | 3  | US-09-286-690-9      | Sequence 9, Appli |
| 6      | 229.5   | 17.2  | 243     | 3  | US-09-286-690-10     | Sequence 10, Appl |
| 7      | 225     | 16.9  | 238     | 3  | US-09-286-690-7      | Sequence 7, Appli |
| 8      | 222.5   | 16.7  | 242     | 3  | US-09-286-690-11     | Sequence 11, Appl |
| 9      | 220.5   | 16.5  | 237     | 1  | US-08-103-998-4      | Sequence 4, Appli |
| 10     | 200.5   | 15.0  | 526     | 4  | US-09-248-796A-14807 | Sequence 14807, A |
| 11     | 189     | 14.2  | 245     | 3  | US-09-286-690-2      | Sequence 2, Appli |
| 12     | 185     | 13.9  | 462     | 4  | US-09-248-796A-14808 | Sequence 14808, A |

# Database : A\_Geneseq\_23Sep04:\* 1: geneseqp1980s:\* 2: geneseqp1990s:\* 3: geneseqp2000s:\* 4: geneseqp2001s:\*

5: geneseqp2002s:\*
6: geneseqp2003as:\*
7: geneseqp2003bs:\*

8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|        |       | ક     |        |    |          |                    |
|--------|-------|-------|--------|----|----------|--------------------|
| Result |       | Query |        |    |          |                    |
| No.    | Score | Match | Length | DB | ID       | Description        |
| 1      | 257.5 | 19.3  | 308    | 2  | AAW93001 | Aaw93001 B. alkalo |
| 2      | 246.5 | 18.5  | 242    | 1  | AAP95000 | Aap95000 Bacillus  |
| 3      | 244   | 18.3  | 214    | 4  | AAE07317 | Aae07317 Barley re |
| 4      | 244   | 18.3  | 239    | 2  | AAR06621 | Aar06621 Hybrid (1 |
| 5      | 230   | 17.3  | 212    | 5  | ABP58995 | Abp58995 Paenibaci |
| 6      | 226   | 17.0  | 234    | 2  | AAR03775 | Aar03775 Thermosta |
| 7      | 226   | 17.0  | 237    | 2  | AAR05803 | Aar05803 Heat-stab |
| . 8    | 225   | 16.9  | 208    | 5  | ABB76858 | Abb76858 Bacterial |
| 9      | 225   | 16.9  | 214    | 5  | ABB76859 | Abb76859 Bacterial |
| 10     | 220.5 | 16.5  | 237    | 2  | AAR06622 | Aar06622 Hybrid (1 |
| 11     | 204.5 | 15.3  | 504    | 8  | ADP98858 | Adp98858 C. albica |
| 12     | 189   | 14.2  | 245    | 2  | AAW37884 | Aaw37884 Lichenase |
| 13     | 185   | 13.9  | 453    | 7  | ADC01836 | Adc01836 C. albica |
| 14     | 185   | 13.9  | 453    | 8  | ADP98992 | Adp98992 C. albica |

Database :

PIR\_79:\*

1: pir1:\*

2: pir2:\*

3: pir3:\*

4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|        |        | ક     |        |    |        |                    |
|--------|--------|-------|--------|----|--------|--------------------|
| Result |        | Query |        |    |        |                    |
| No.    | Score  | Match | Length | DB | ID     | Description        |
| 1      | 2020.5 | 70.5  | 720    | 2  | T52564 | Mrel1 protein homo |
| 2      | 852.5  | 29.8  | 649    | 1  | S58097 | probable dna repai |
| 3      | 768    | 26.8  | 692    | 1  | S57592 | probable phosphoes |
| 4      | 724    | 25.3  | 772    | 2  | T27512 | hypothetical prote |
| 5      | 178    | 6.2   | 443    | 1  | G69378 | probable phosphoes |
| 6      | 175.5  | 6.1   | 423    | 2  | E75103 | phosphoesterase ho |
| 7      | 174.5  | 6.1   | 413    | 1  | D71083 | probable phosphoes |
| 8      | 163.5  | 5.7   | 587    | 1  | E69171 | phosphoesterase-re |
| 9      | 150.5  | 5.3   | 381    | 2  | C90395 | DNA repair protein |
| 10     | 143    | 5.0   | 1038   | 2  | JC5497 | claustrin - chicke |
| 11     | 141.5  | 4.9   | 409    | 2  | E72765 | probable phosphoes |
| 12     | 136    | 4.7   | 1957   | 2  | T38077 | hypothetical coile |

```
Database :
```

```
Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
```

2: /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*
3: /cgn2\_6/ptodata/1/iaa/6A\_COMB.pep:\*
4: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
5: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*

6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|        |        | ક     |        |    |                      |                   |
|--------|--------|-------|--------|----|----------------------|-------------------|
| Result | -      | Query | •      |    |                      |                   |
| No.    | Score  | Match | Length | DB | ID                   | Description       |
|        |        |       |        |    |                      |                   |
| 1      | 2864   | 100.0 | 552    | 4  | US-09-835-654-2      | Sequence 2, Appli |
| 2      | 2020.5 | 70.5  | 720    | 3  | US-09-480-921B-8     | Sequence 8, Appli |
| 3      | 954.5  | 33.3  | 680    | 4  | US-09-538-092-1165   | Sequence 1165, Ap |
| 4      | 768    | 26.8  | 692    | 4  | US-09-538-092-632    | Sequence 632, App |
| 5      | 507.5  | 17.7  | 270    | 4  | US-09-248-796A-19151 | Sequence 19151, A |
| 6      | 141.5  | 4.9   | 132    | 4  | US-09-270-767-33195  | Sequence 33195, A |
| 7      | 141.5  | 4.9   | 132    | 4  | US-09-270-767-48412  | Sequence 48412, A |
| 8      | 136    | 4.7   | 857    | 4  | US-09-248-796A-20522 | Sequence 20522, A |
| 9      | 122    | 4.3   | 1120   | 3  | US-09-147-404-1      | Sequence 1, Appli |
| 10     | 122    | 4.3   | 1935   | 4  | US-09-538-092-916    | Sequence 916, App |